



# A-GRAM



AIR FORCE CIVIL ENGINEER SUPPORT AGENCY

99-01

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## MOBILE AIRCRAFT ARRESTING SYSTEM (MAAS) UPGRADE

### SYNOPSIS:

When the MAAS initially was brought into the inventory, each trailer was supplied with two gasoline-engine powered hydraulic power units (HPUs) and two sets of tools. The HPUs are needed to facilitate raising and lowering the trailer, operation of the on-board winch, and installation of the anchoring system. Over the years, the HPUs became log-istically unsupportable.

Recognizing the need to find a replacement for the obsolete HPU, HQ AFCESA initiated a project to evaluate an alternative HPU manufactured by Stanley Hydraulic Tools. The evaluation compared performance of the Stanley HPU and tools with the HPU and tools originally supplied with the MAAS. Tests were performed for all functions of the equipment, and the Stanley performed as well or better in all

phases of the tests. The evaluation also assessed compatibility of the Stanley unit to interface with trailer storage locations, hydraulic connections, and use with the original tools. The study found that original tools can be connected and operated with the new HPU, but because the Stanley HPU operates at higher flow rates and pressures, tool damage or personal injury could occur if the equipment is co-mingled. For this reason, all four HPUs and all hydraulic tools originally supplied with each MAAS should be retrofitted simultaneously. The equipment easily fits the original storage locations, but it is necessary to change the hydraulic connections on the MAAS trailer and modify the HPU platform fastening mechanism to accomplish the upgrade.

### WHEN TO ACCOMPLISH:

Because MAAs are classed as War Reserve Materiel, many of the original HPUs are still in serviceable condition and may not need to be replaced for several years. For this reason, the owning activity must decide when to upgrade their systems.

### WHO PAYS:

Funding for the upgrade must be provided by the owning command.

### HOW IT'S DONE:

Complete instructions, including part numbers and descriptions of two new tools that will make the job safer and easier, are given in Engineering Technical Letter 98-10, available in the Library section of the AFCESA Home Page. Use URL <http://www.afcesa.af.mil>, then click on Library, then ETLs.

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